

REMARKS

Claims 11, 12, 21-26 and 30-36 were pending in the above-identified application when last examined. This response cancels claims 24, 25, 30, and 31-36, amends claims 11, 12, 22, 23, and 26, and adds claims 37-40. Accordingly, claims 11, 12, 21-23, 26, and 37-40 as indicated above are presented for examination.

Claims 32-36 were withdrawn from consideration based on Applicants' election in response to a previous restriction requirement. Claims 32-36 are canceled.

Claims 11, 12, and 21-25 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Pat. No. 6,217,744 (Crosby) in view of U.S. Pat. App. Pub. No. 2003/0082516 (Straus). Claims 24 and 25 are canceled. Applicants respectfully traverse the rejection of claims 11, 12, and 21-23 as amended above.

Independent claim 11 distinguishes over the combination of Crosby and Straus at least by reciting, "a medium containing a labeling substance that comprises first persistent fluorescent structures that emit light having a first frequency and second persistent fluorescent structures that emit light having a second frequency." Neither Crosby nor Straus discloses or suggest a test system using two types of persistent fluorescent structures with each persistent fluorescent structure emitting light with a different frequency. Accordingly, claim 11 is patentable over the combination of Crosby and Straus.

Claims 12 and 21-23 depend from claim 11 and are patentable over Crosby and Straus for at least the same reasons that claim 11 is patentable over Crosby and Straus.

For the above reasons, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103.

Claims 11, 12, 21-23, 26, 30, and 31 were rejected under 35 U.S.C. § 103(a) as unpatentable over Crosby in view of U.S. Pat. App. Pub. No. 2002/0004246 (Daniels). Claims 30 and 31 are canceled. Applicants respectfully traverse the rejection of claims 11, 12, 21-23, and 26 as amended above.

Independent claim 11 distinguishes over the combination of Crosby and Daniels by reciting, "a medium containing a labeling substance that comprises first persistent fluorescent structures that emit light having a first frequency and second persistent

fluorescent structures that emit light having a second frequency ... a first photodetector positioned to measure light of the first frequency originating from the target area of the medium; and a second photodetector position to measure light of the second frequency originating from the control area, wherein a signal from the second photodetector indicating an intensity above a threshold level indicates that the sample has passed through the target area.”

Crosby as noted above fails to disclose or suggest a test system using two types of persistent fluorescent structures with each persistent fluorescent structure emitting light with a different frequency. Daniels discloses use of a “plurality of detection reagents, each specific for a single analyte of interest” and particularly discloses that “each detection reagent may be associated with a nanocrystal having a distinct emission peak.” See paragraph [0207] of Daniels. However, the combination of Crosby and Daniels fails to disclose or suggest measurements of one frequency from a test area and another frequency from a control area.

In accordance with an aspect of the current invention, one type of persistent fluorescent structure that emits a first frequency of light can be used for a target analyte while a second type of persistent structure that emits a second frequency is used for a control. Detection of the second frequency from a control area can then indicate a test is complete, i.e., the sample has moved through the target area. The difference in frequency simplifies elimination of light noise that might otherwise result if light from the control area leaked into the detector for the target area. The combination of Crosby and Daniels fails to suggest this use of differing persistent fluorescent structures. Accordingly, claim 11 is patentable over the combination of Crosby and Daniels.

Claims 12, 21-23, and 26 depend from claim 11 and are patentable over Crosby and Daniels for at least the same reasons that claim 11 is patentable over Crosby and Daniels.

For the above reasons, Applicants request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103.

New claims 37-40 depend from claim 11 and are patentable for at least the same reasons that claim 11 is patentable .

For the above reasons, Applicants respectfully request allowance of the application including claims 11, 12, 21-23, 26, and 37-40. Please contact the undersigned attorney at

(408) 927-6700 if there are any questions concerning the application or this document.

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Respectfully submitted,



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